4. Bio-availability at National Institute for Pharmaceutical Education and Research (NIPER), Chandigarh.

5. Genomics Research for Drug Discovery at Institute of Genomics and Integrative Biology (IGIB), Delhi.

6. Identification of Immunomodulating Potential of Products and Extracts of Natural Origin at Indian Institute of Chemical Biology (IICB), Kolkata.

7. Strengthening of Pharmacological Testing Facilities at CDRI, Lucknow.

8. Characterisation of Crystals of Biological Macromolecules of Medicinal and Industrial Importance at Indian Institute of Science (IISc.), Bangalore.

- DSIR approved lab. in the private sector can avail of tax deduction upto 150 per cent of the expenditure on R&D.

However, there is a need to go substantially beyond these initiatives to make the country a global leader and the Government proposes to take the necessary steps.

(b) During the last three years Ministry of Science and Technology has spent Rs. 4948 lakhs in 2001-02, Rs. 6340 lakhs in 2002-03 and Rs. 8910 lakhs in 2003-04 respectively on Drug Development R&D in the country.

Forecasting of outbreak of dreaded diseases

798. SHRI NANDI YELLAIAH: Will the Minister of SCIENCE AND TECHNOLOGY be pleased to state:

(a) whether Biology Division of Indian Institute of Chemical Technology, Hyderabad, is coming-up with a Bio-Informatics software capable of forecasting the out-break of the dreaded Japanese Encephalitis and dengue fever in Andhra Pradesh;

(b) if so, whether sufficient funds had been released for this important project, to expedite the results;

(c) if so, the details thereof and present status of progress of this project; and

(d) if not, the reasons for not releasing sufficient funds for this project?

THE MINISTER OF STATE OF THE MINISTRY OF SCIENCE AND TECHNOLOGY (SHRI KAPIL SIBAL): (a) Yes, Sir. Attempts are being made at IICT in association with Centre for Research and Medical Entomology, Madurai to develop a software to forecast the Japanese Encephalitis (JE) incidence. These attempts are confined to JE.

(b) Yes, Sir. Adequate funds have been provided for the study by the Indian Council of Medical Research (ICMR).

(c) The project will cost a total of Rs. 24.50 lakhs for a period of 3 years and the studies are expected to be completed by the end of March, 2006.

(d) Does not arise.

Development of improved gene of rice by Delhi University

799. SHRIMATI N.P. DURGA: Will the Minister of SCIENCE AND TECHNOLOGY be pleased to state:

(a) whether it is a fact that the Department of Molecular Biology, Delhi University has developed "improved genes" in a rice plant;

(b) if so, the details of the research carried out; and

(c) how it would help in increasing the yield per acre?

THE MINISTER OF STATE OF THE MINISTRY OF SCIENCE AND TECHNOLOGY (SHRI KAPIL SIBAL): (a) and (b) The Department of Plant Molecular Biology, University of Delhi, South Campus, New Delhi has not developed any improved genes in rice plant. Rather, it has characterized a rice gene *OSISAP 1 (Oryza sativa* subspecies *indica* stress-associated protein gene 1) and introduced it into model test plant tobacco for investigation. The expression of this gene was found to be induced by several stress stimuli. The gene was found helpful in developing tolerance against abiotic stresses such as cold, dehydration and salinity in tobacco at seedling stage in experimental laboratory conditions.

(c) In view of (a) & (b) above, question does not arise.